

IN THE CLAIMS:

Please amend the claims as indicated below, without prejudice:

1. (Currently Amended) A method ~~to automatically create~~ of creating a three-dimensional nail object, comprising:

~~starting with~~ receiving a three-dimensional array of data representing a digitized nail surface, ~~and, measuring including~~ receiving data in the form of key reference points on ~~along~~ the digitized nail surface along the X-axis, Y-axis and Z-axis, ~~and;~~

supplying a set of ~~using supplied~~ parameters to ~~automatically create~~ that define a desired three-dimensional representation of an artificial nail object, in terms of size and shape for the artificial nail object ~~by generating new;~~

manipulating the three-dimensional array of data repre-
senting the digitized nail surface along the X-axis, Y-axis and Z-axis to correspond to ~~as determined by the supplied~~ the size and shape of the artificial nail object parameters, ~~and;~~

merging the final nail object is a combination of the
three-dimensional array of data representing the digitized nail surface and with the ~~generated three-dimensional surface so as to~~ create desired three-dimensional representation of the artificial nail object resulting in a desired final artificial nail object that conforms to an expected result so that the final nail object

will fit over the digitized nail surface and create a desired artificial nail appearance.

2. (Currently Amended) The method of Claim 1, wherein ~~starting with a~~ the three-dimensional array of data representing a digitized nail surface includes any data that can be used to represent a three-dimensional object.

3. (Original) The method of Claim 1, wherein the three-dimensional array of data may be represented as points of data representing an X-axis, Y-axis and Z-axis.

4. (Currently Amended) The method of Claim 1, wherein ~~measuring key reference points~~ the method further includes determining ~~the~~ a measurement value in millimeters or inches of the nail surface along its X-axis, Y-axis and Z-axis; where X-axis represents width, Y-axis represents the length, and Z-axis represents depth.

5. (Currently Amended) The method of Claim 1, wherein ~~measuring key reference points~~ the method further includes determining the arc of the digitized nail surface along the X-axis and/or determining the arc of the nail surface along the Y-axis.

6. (Currently Amended) The method of Claim 1, wherein ~~measuring key reference points~~ the method further includes evaluating three-dimensional points along the periphery of the nail surface.

7. (Currently Amended) The method of Claim 1, wherein ~~measuring the~~ key reference points includes ~~evaluating~~ three-dimensional points along the nail surface at key points ~~including,~~ comprising points along the Y-axis through the center of the nail surface when viewed along its X-axis, and; points along the X-axis located a approximately 2/3rds the distance from the edge of the cuticle end of the nail surface measured on the Y-axis. ~~This, said~~ intersection represents the highest point reference of the generated nail object, ~~or~~ and; using all or any substantial portion of three-dimensional points of the nail surface.

8. (Currently Amended) The method of Claim 1, wherein ~~using the supplied~~ parameters include ~~[[s]]~~ constant parameters that are predetermined. ~~Where these parameters~~ and include predetermined curves, lengths, widths and heights, which are consistent with the desired object dimensions. ~~These constants may be changed to create the desired nail object.~~

9. (Currently Amended) The method of Claim 1, wherein ~~using~~
~~the supplied~~ parameters include[[s]] supplying the parameters at
the time the object is created. ~~Where these parameters and~~
include predetermined curves, lengths, widths and heights, which
are consistent with the desired object dimensions.

10. (Currently Amended) The method of Claim 1, wherein
~~generating new three-dimensional data manipulating the three-~~
~~dimensional array of data representing the digitized nail surface~~
includes using the ~~supplied~~ parameters to mathematically create
new three-dimensional data that forms the top surface of the
desired nail object, where the ~~supplied~~ parameters dictate the
top surface data that is generated.

11. (Currently Amended) The method of Claim 1, wherein
~~generating new three-dimensional data manipulating the three-~~
~~dimensional array of data representing the digitized nail surface~~
includes using the ~~supplied~~ parameters to mathematically create
new three-dimensional data that forms a nail tip for the desired
nail object, ~~further~~ and where any potential holes in the three-
dimensional data occur, ~~they~~ are filled during the generation
method.

12. (Currently Amended) The method of Claim 1, wherein the desired nail object is achieved by combining the new generated surface as the top surface of the desired nail object and the digitized nail surface forms the bottom surface of the desired nail object[[.]] wherein [[T]]the two surfaces are then combined to create the desired nail object.

13. (Original) The method of Claim of 1, wherein the desired nail object in its final state is a customized three-dimensional object representing an artificial nail that is desired, which fits over the digitized nail surface.

14. (Currently Amended) A process ~~to automatically create~~ of creating a three-dimensional nail object, comprising:

~~starting with~~ receiving a three-dimensional array of data representing a digitized nail surface, ~~and, measuring~~ including receiving data in the form of key reference points on ~~along~~ the digitized nail surface along the X-axis, Y-axis and Z-axis, ~~and;~~

supplying a set of ~~using supplied~~ parameters to ~~automatically create~~ that define a desired three-dimensional representation of an artificial nail object, in terms of size and shape for the artificial nail object ~~by generating new;~~

manipulating the three-dimensional array of data representing the digitized nail surface along the X-axis, Y-axis and

Z-axis to correspond to as determined by the supplied the size and shape of the artificial nail object parameters, and;

merging the final nail object is a combination of the three-dimensional array of data representing the digitized nail surface and with the generated three-dimensional surface so as to create desired three-dimensional representation of the artificial nail object resulting in a desired final artificial nail object that conforms to an expected result so that the final nail object will fit over the digitized nail surface and create a desired artificial nail appearance.

15. (Currently Amended) The process of Claim 14, wherein ~~starting with a~~ the three-dimensional array of data representing a digitized nail surface includes any data that can be used to represent a three-dimensional object.

16. (Original) The process of Claim 14, wherein the three-dimensional array of data may be represented as points of data representing an X-axis, Y-axis and Z-axis.

17. (Currently Amended) The process of Claim 14, wherein ~~measuring key reference points~~ the process further includes determining ~~the~~ a measurement value in millimeters or inches of the nail surface along its X-axis, Y-axis and Z-axis; where

X-axis represents width, Y-axis represents the length, and Z-axis represents depth.

18. (Currently Amended) The process of Claim 14, wherein ~~measuring key reference points~~ the process further includes determining the arc of the digitized nail surface along the X-axis and/or determining the arc of the nail surface along the Y-axis.

19. (Currently Amended) The process of Claim 14, wherein ~~measuring key reference points~~ the process further includes evaluating three-dimensional points along the periphery of the tip of the nail surface.

20. (Currently Amended) The process of Claim 14, wherein ~~measuring key reference points includes evaluating three-~~ dimensional points along the nail surface at key points including; points along the Y-axis through the center of the nail surface when viewed along its X-axis, and; points along the X-axis located a approximately 2/3rds the distance from the edge of the cuticle end of the nail surface measured on the Y-axis. ~~This~~ said intersection represents the highest point reference of the generated nail object, ~~or~~ and;

using all or any substantial portion of three-dimensional points of the nail surface.

21. (Currently Amended) The process of Claim 14, wherein using the supplied parameters include[[s]] constant parameters that are predetermined. ~~Where these parameters and~~ include predetermined curves, lengths, widths and heights, which are consistent with the desired object dimensions. ~~These constants may be changed to create the desired nail object.~~

22. (Currently Amended) The process of Claim 14, wherein using the supplied parameters include[[s]] supplying the parameters at the time the object is created. ~~Where these parameters and~~ include predetermined curves, lengths, widths and heights, which are consistent with the desired object dimensions.

23. (Currently Amended) The process of Claim 14, wherein ~~generating new three-dimensional data~~ manipulating the three-dimensional array of data representing the digitized nail surface includes using the ~~supplied~~ parameters to mathematically create new three-dimensional data that forms the top surface of the desired nail object, where the ~~supplied~~ parameters dictate the top surface data that is generated.

24. (Currently Amended) The process of Claim 14, wherein ~~generating new three-dimensional data manipulating the three-dimensional array of data representing the digitized nail surface~~ includes using the ~~supplied~~ parameters to mathematically create new three-dimensional data that forms a nail tip for the desired nail object, ~~further~~ and where any potential holes in the three-dimensional data occur, they are filled during the generation process.

25. (Currently Amended) The process of Claim 14, wherein the desired nail object is achieved by combining the new generated surface as the top surface of the desired nail object and the digitized nail surface forms the bottom surface of the desired nail object ~~[[.]]~~ wherein ~~[[T]]~~ the two surfaces are then combined to create the desired nail object.

26. (Original) The process of Claim of 14, wherein the desired nail object in its final state is a customized three-dimensional object representing an artificial nail that is desired, which fits over the digitized nail surface.

27. (Currently Amended) A computer program ~~to automatically create a three-dimensional nail object~~ comprising a set of

instructions stored on computer readable memory that are processed by a processor, comprising:

~~starting with receiving~~ a three-dimensional array of data representing a digitized nail surface, ~~and, measuring including receiving data in the form of key reference points on along the digitized nail surface along the X-axis, Y-axis and Z-axis, and;~~

supplying a set of using supplied parameters to automatically create that define a desired three-dimensional representation of an artificial nail object, in terms of size and shape for the artificial nail object by generating new;

manipulating the three-dimensional array of data representing the digitized nail surface along the X-axis, Y-axis and Z-axis to correspond to as determined by the supplied the size and shape of the artificial nail object parameters, and;

merging the final nail object is a combination of the three-dimensional array of data representing the digitized nail surface and with the generated three-dimensional surface so as to create desired three-dimensional representation of the artificial nail object resulting in a desired final artificial nail object that conforms to an expected result so that the final nail object will fit over the digitized nail surface and create a desired artificial nail appearance.

28. (Currently Amended) The computer program of Claim 27, wherein ~~starting with a~~ the three-dimensional array of data representing a digitized nail surface includes any data that can be used to represent a three-dimensional object.

29. (Original) The computer program of Claim 27, wherein the three-dimensional array of data may be represented as points of data representing an X-axis, Y-axis and Z-axis.

30. (Currently Amended) The computer program of Claim 27, wherein ~~measuring key reference points~~ the computer program further includes determining ~~the~~ a measurement value in millimeters or inches of the nail surface along its X-axis, Y-axis and Z-axis; where X-axis represents width, Y-axis represents the length, and Z-axis represents depth.

31. (Currently Amended) The computer program of Claim 27, wherein ~~measuring key reference points~~ the computer program further includes determining the arc of the digitized nail surface along the X-axis and/or determining the arc of the nail surface along the Y-axis.

32. (Currently Amended) The computer program of Claim 27, wherein ~~measuring key reference points~~ the computer program

further includes evaluating three-dimensional points along the periphery of the tip of the nail surface.

33. (Currently Amended) The computer program of Claim 27, wherein ~~measuring~~ key reference points includes ~~evaluating~~ three-dimensional points along the nail surface at key points including; points along the Y-axis through the center of the nail surface when viewed along its X-axis, and; points along the X-axis located a approximately 2/3rds the distance from the edge of the cuticle end of the nail surface measured on the Y-axis. ~~This~~ said intersection represents the highest point reference of the generated nail object, ~~or~~ and; using all or any substantial portion of three-dimensional points of the nail surface.

34. (Currently Amended) The computer program of Claim 27, wherein ~~using supplied~~ the parameters includes constant parameters that are predetermined. ~~Where these parameters and~~ include predetermined curves, lengths, widths and heights, which are consistent with the desired object dimensions. ~~These constants may be changed to create the desired nail object.~~

35. (Currently Amended) The computer program of Claim 27, wherein ~~using supplied~~ the parameters include[[s]] supplying the parameters at the time the object is created. ~~Where these~~

~~parameters~~ and include predetermined curves, lengths, widths and heights, which are consistent with the desired object dimensions.

36. (Currently Amended) The computer program of Claim 27, wherein ~~generating new three-dimensional data~~ manipulating the three-dimensional array of data representing the digitized nail surface includes using the ~~supplied~~ parameters to mathematically create new three-dimensional data that forms the top surface of the desired nail object, where the ~~supplied~~ parameters dictate the top surface data that is generated.

37. (Currently Amended) The computer program of Claim 27, wherein ~~generating new three-dimensional data~~ manipulating the three-dimensional array of data representing the digitized nail surface includes using the ~~supplied~~ parameters to mathematically create new three-dimensional data that forms a nail tip for the desired nail object, ~~further~~ and where any potential holes in the three-dimensional data occur, they are filled during the generation computer program.

38. (Currently Amended) The computer program of Claim 27, wherein the desired nail object is achieved by combining the new generated surface as the top surface of the desired nail object and the digitized nail surface forms the bottom surface of the

desired nail object[[.]] wherein [[T]]the two surfaces are then combined to create the desired nail object.

39. (Original) The computer program of Claim of 27, wherein the desired nail object in its final state is a customized three-dimensional object representing an artificial nail that is desired, which fits over the digitized nail surface.